What is claimed is:

1. A method of treating unwanted choroidal neovasculature in a mammal, the choroidal neovasculature comprising endothelial cells, the method comprising the steps of:

(a) administering to the mammal an anti-angiogenesis factor in an amount sufficient to permit an effective amount to localize in the choroidal neovasculature;

(b) administering to the mammal an amount of photosensitizer sufficient to permit an effective amount to localize in the choroidal neovasculature; and

(c) irradiating the choroidal neovasculature with laser light such that the light is absorbed by the photosensitizer so as to occlude the choroidal neovasculature, wherein damage to the endothelial cells resulting from steps (a), (b), and (c) is greater than that resulting only from steps (b) and (c).

2. The method of claim 1, wherein the mammal is a primate.

3. The method of claim 2, wherein the primate is a human.

4. The method of claim 1, wherein the anti-angiogenesis factor is administered to the mammal prior to administration of the photosensitizer.

5. The method of claim 1, wherein the photosensitizer is an amino acid derivatives, an azo dye, a xanthene derivative, a chlorin, a tetrapyrrole derivative, or a phthalocyanine.

6. The method of claim 5, wherein the photosensitizer is lutetium texaphyrin, a benzoporphyrin, a benzoporphyrin derivative, a hematoporphyrin, or a hematoporphyrin derivative.

7. The method of claim 1, wherein the anti-angiogenesis factor is angiostatin, endostatin, a peptide containing a RGD tripeptide sequence and capable of binding the $\alpha v\beta 3$ integrin, a COX-2 inhibitor or pigment epithelium derived growth factor.

8. The method of claim 1, wherein occlusion of the choroidal neovasculature resulting from steps (a), (b) and (c) is greater than that resulting from steps (b) and (c) alone.

9. The method of claim 1, wherein the method more selectively occludes choroidal neovasculature relative to the same treatment lacking administration of the anti-angiogenesis factor.

10. A method of treating unwanted choroidal neovasculature in a mammal, the choroidal neovasculature comprising endothelial cells, the method comprising the steps of:

(a) administering to the mammal an amount of photosensitizer to permit an effective amount to localize in the neovasculature, the photosensitizer comprising a targeting moiety that binds preferentially to endothelial cells of the neovasculature; and

(b) irradiating the neovasculature with a laser light such that the light is absorbed by the photosensitizer so as to occlude the choroidal neovasculature.

11. The method of claim 10, wherein the mammal is a primate.

12. The method of claim 11, wherein the mammal is a human.

13. The method of claim 10, wherein the targeting moiety is a peptide.

14. The method of claim 13, wherein the peptide binds specifically to an α-v ß integrin or is an antibody that binds specifically to a vascular endothelial growth factor receptor.

15. The method of claim 14, wherein the integrin is α-v β3 integrin or α-v β5 integrin.

16. The method of claim 14, wherein the antibody is a monoclonal antibody or an antigen binding fragment thereof, a polyclonal antibody or an antigen binding fragment thereof, or a biosynthetic antibody binding site.

17. The method of claim 10, wherein the photosensitizer is an amino acid derivatives, an azo dye, a xanthene derivative, a chlorin, a tetrapyrrole derivative, and a phthalocyanine.

18. The method of claim 17, wherein the photosensitizer is lutetium texaphryin, a benzoporphyrin, a benzoporphyrin derivative, a hematoporphyrin or a hematoporphyrin derivative.

19. The method of claim 10, wherein the targeting moiety enhances the specificity of the photosensitizer to choroidal neovasculature relative to photosensitizer lacking the targeting moiety.

20. A method of treating unwanted choroidal neovasculature in a mammal, the method comprising the steps of:

(a) administering to the mammal, an apoptosis-modulating factor in an amount sufficient to permit an effective amount to localize in the choroidal neovasculature or tissue surrounding the choroidal neovasculature;

(b) administering to the mammal an amount of photosensitizer sufficient to permit an effective amount of localize in the choroidal neovasculature; and

(c) irradiating the choroidal neovasculature with laser light such that the light is absorbed by the photosensitizer so as to occlude the choroidal neovasculature, wherein the level of cell damage to the choroidal neovasculature relative to the tissue surrounding the choroidal neovasculature resulting from steps (a), (b) and (c) is greater than that resulting from steps (b) and (c) alone.

21. The method of claim 20, wherein the mammal is a primate.

22. The method of claim 21, wherein the mammal is a human.

23. The method of claim 20, wherein the factor is administered to the primate before administration of the photosensitizer.

24. The method of claim 20, wherein the photosensitizer is an amino acid derivatives, an azo dye, a xanthene derivative, a chlorin, a tetrapyrrole derivative, or a phthalocyanine.

25. The method of claim 20, wherein the photosensitizer is lutetium texaphyrin, a benzoporphyrin, a benzoporphyrin derivative, a hematoporphyrin or a hematoporphyrin derivative.

26. The method of claim 20, wherein the apoptosis modulating factor induces or represses apoptosis.

27. The method of claim 26, wherein the factor is a peptide.

28. The method of claim 27, wherein the peptide selectively binds to neovasculature.

29. The method of claim 27, wherein the peptide induces apoptosis in endothelial cells.

30. The method of claim 29, wherein the peptide comprises an amino acid sequence comprising, in an N- to C-terminal direction, KLAKLAKKLAKLAK (SEQ. ID. NO 1).

31. The method of claim 30, wherein the peptide further comprises an RGD-4C peptide sequence.

32. The method of claim 1, wherein the method ameliorates the symptoms of a disorder selected from the group consisting of age-related macular degeneration, ocular histoplasmosis syndrome, pathologic myopia, angioid streaks, idiopathic disorders, choroiditis, choroidal rupture, overlying choroid nevi, and inflammatory diseases.